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ABSTRACT

This proposal for the establishment of university centers for the history, philosophy, and comparative aspects of physical education and sport is based on the assumption that there is a need for, and a developing interest in, improved teaching, research, and service in these subdisciplinary areas of the field of physical education and sport. The field of physical education and sport is faced with the absolute necessity of retooling in order to upgrade its research efforts in these areas. As planned, there would be five subdivisions within the proposed centers: (1) a teaching and research subdivision, (2) an oral history research office, (3) a sport museum, (4) a physical education and sport review and/or journal, and (5) a documentation division. Also, the establishment of a theme or approach around which the center could base its efforts would be of considerable advantage to the project. (Included are explanations of how the various subdivisions of the proposed center might function, and what the work of each would probably entail.) (RC)

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A PROPOSAL FOR THE ESTABLISHMENT OF UNIVERSITY CENTERS FOR THE HISTORY, PHILOSOPHY, AND COMPARATIVE ASPECTS OF PHYSICAL EDUCATION AND SPORT

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This proposal for the establishment of university centers for the history, philosophy, and comparative aspects of physical education and sport is based on the assumption that there is a need for, and a developing interest in, improved teaching, research, and service in these sub-disciplinary areas of the field.* At present there seem to be reasonably strong indications that the time is ripe for such a development, and there is every reason why it would be appropriate for such centers to develop within the framework of most universities in Canada and the United States.

Few would deny that many cultural advances have been made in the world in the last quarter century, although it must be admitted further that many "benign achievements have their malign sides." There has been significant advancement within the field of physical education and sport as well. It has become increasingly apparent that the many historical occurrences, social influences, and scientific discoveries and inventions all hold implications for this field. It is also true conversely that sport, physical activity, and dance -- human movement phenomena -- have had a most significent impact on individual man and man in culture. Therefore, the knowledge explosion has caught up with physical education and sport just as it has with other developing disciplines, and the increase of such knowledge in a geometric ratio is fast making it

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impossible to keep up with retrieval through what have been considered normal channels in the past.

Before proceeding it seems necessary to mention parenthetically that the potentialities for both pure and applied research in physical education and sport are limitless. Many reasonably well-informed people do not understand how it is possible for physical education to be related to the humanities, the social sciences, and the natural sciences at one and the same time. This is true because of the unique nature of the field -- a sort of "man moving" or "man in motion" approach that asks an endless variety of questions about the non-verbal humanities aspects of the human animal. All of this means that there are possible relationships with physiology, anatomy, psychology, sociology, history, philosophy, anthropology, economics, political science, administrative science, bio-chemistry, physics, scientific medicine, and others not yet envisioned.

The Reasons For This Proposal

The main reason for this proposal urging the establishment of university centers or institutes is to insure that the history, philosophy, and comparative or international aspects of the field of physical education and sport as a growing profession and discipline are faithfully recorded, investigated, analyzed, interpreted, and compared. In the past, historical investigation, especially in so far as master's and doctoral theses are concerned, has been reasonably popular and well executed, but studies relating to philosophy and the comparative and/or international aspects of of the field have been insufficient and sporadic. Philosophical

studies have been normative in nature largely, and only very few have been analytical or critical. Comparative and/or international investigations in this field have been dominated by what might be called "travellers' tales" and "educational borrowing." This era was followed by one in which international cooperation and harmony were stressed -- as long as a certain political philosophy prevailed in all countries being considered. It is time that more careful analyses be made of the many and varied educational and social phenomena that exist in the large number of countries on the different continents. There is now a need also for additional investigation backed by the developing research methodology and techniques of the social sciences.

Scholarly Endeavor in Physical Education Must Be Upgraded

The field of physical education and sport is faced with the absolute necessity of retooling in order to upgrade its research efforts in these areas being discussed. In the process our graduate programs will need to be structured increasingly in such ways that the field will be able to cope with the knowledge that is becoming available both within the field and from the closely related professions and disciplines mentioned above. Still further, there is a need for post-doctoral fellowships so that young scholars and researchers in these sub-disciplinary areas under consideration for the proposed centers or institutes will have the opportunity to gain greater research competence. Within a reasonably short period of time, those men and women who relate to these centers through their various subdivisions should be placed in teaching and research positions at all educational levels all over the continent and

throughout the world.

Suggested Subdivisions for the Centers/Institutes

As planned by the writers, there would be five subdivisions within the proposed centers as follows:

1. Teaching and Research Subdivision (see Appendix #1 for details)

   In this aspect of the continuing center program, steady relationships would be maintained with those professors who are teaching courses relating to each of these areas of endeavor at both the undergraduate and graduate levels (in both professional and disciplinary curricular tracks or areas of concentration). In the academic programs of physical education and sport, the disciplinary and professional courses would be in the areas of history, philosophy and comparative and/or international aspects of the field. Further, undergraduate and graduate students undertaking term papers, special projects, individual research, master's theses, and doctoral dissertations would find such centers with their various sub-divisions most useful to them.

2. Oral History Research Office (see Appendix #2 for details)

   The purpose of such an office is to obtain valuable source material, raw historical data, through tape-recorded interviews with persons who have made, and are making, important contributions to physical education and sport. There should be an Oral History Research Committee with a Chairman, who would typically be known also as the Oral History Research Office Director or Superviser. Efforts should be made to acquire information that can be used as primary source data in the investigation of persistent historical problems in the field, and also to obtain a biographical account of the person being interviewed. The Oral History Collection should be open to all master's and doctoral students, as well as to faculty members of the university involved. Further, no serious student of history would be denied access to this collection, except as stipulated by a specific individual in connection with his or her personal memoirs.

3. Sport Museum (see Appendix #3 for details)

   The establishment of a sport and physical education

museum will be an important part of the work of the proposed center. Such a museum should provide an excellent opportunity for cooperation among physical education, intercollegiate athletics, and the various sports-governing bodies. A knowledgeable curator should be appointed on a part-time basis, and this man or woman would typically be involved in teaching, writing, and research in the area of sport history. Such a museum could be limited to a university itself, or it could be expanded to include artifacts and other historical memorabilia from the city, county, province, region, or nation. There are many ways in which such a unit could relate to the teaching, research, and service functions of today's complex university structure. The curator appointed would obviously relate to a campus coordinating committee on museums (where such is in existence).

4. Physical Education and Sport Review and/or Journal (see Appendix#4 for details)

Such a center or institute for the history, philosophy, and comparative aspects of physical education and sport could well sponsor a semi-annual review or journal that would feature articles relating to the three areas in which the center would specialize. The format for such a magazine should be carefully established during an orderly period of planning. (For example, it could be a popular magazine for the general public or a scholarly journal for the profession.) There should be a board of associate editors with a chairman and also a managing editor. At this time the idea of making available another refereed journal is important to the profession. Budgetary estimates will need to be prepared for the issuing of such a publication, and the possibility of a seed grant to get such a journal started should be explored. Editorial and distribution policies will need to be developed as well.

5. Documentation Division (see Appendix #5 for details)

A fifth subdivision of such a center could well be a documentation division. As various library materials are gathered, and as the oral history collection develops, this divison could provide a documentation service in the designated areas of interest to nearby public schools and community colleges, and perhaps other universities. Eventually such items as slides, films, film strips, sound slides, and other teaching aids could be added to this service. Such materials could be made available at a reasonable profit to the division of the center. Further, a retrieval system should be begun for the collection and abstracting of published articles, and soon this material would have to be stored in some electro-mechanical fashion for instant retrieval.

Identification of a Theme

The establishment of a theme or approach around which the center could base its efforts would seem to offer considerable advantage to those relating to this project. For example, one approach would be to employ the fifteen persistent historical problems that have been identified over a period of years by Professor Zeigler and his associates. These problems, all of which have been related to physical education and sport, are as follows:

1. The influence of a society's values
2. The influence of politics
3. The influence of economics
4. The influence of religion
5. The influence of nationalism
6. Ecology
7. Professional preparation
8. Methods of instruction
9. The role of administration
10. The concept of the healthy body
11. Sport and physical activity for women
12. The role of dance
13. The use of leisure
14. Amateurism, semi-professionalism, and professionalism
15. The concept of progress

The assumption is that these fifteen persistent or perennial problems, or various aspects thereof, may be traced historically, delineated philosophically, and/or compared from country to country. In such a way as this, the work of the center or institute could be on a continuing, possibly never-ending basis. It is quite possible, of course, that new persistent problems might from time to time be added to the tentatively established list, or certain ones now included might be eliminated.

The following pages outline in reasonable, but tentative, detail how the various subdivisions of the proposed center might

function, and what the work of each would probably entail.

Appendix #1

Teaching and Research Subdivision

The Teaching and Research Subdivision of the proposed Center or Institute would be available to both undergraduate and graduate students of the university where it was located. Professors teaching courses in the areas of history, philosophy, and international aspects of physical education and sport would be invited to affiliate with the Center. There is every reason to believe further that certain faculty members and a number of students from other disciplines within the university would make some use of the facilities, equipment, and services of the center and its associates. It can reasonably be assumed that interdisciplinary relationships would develop with those functioning in history, history of education, philosophy, philosophy of education, comparative and international education, sociology, educational sociology, anthropology, economics, political science, and other related subject-matters.

Still further, the teaching, research, and service functions of the center could hold significance for students no matter whether their interests are primarily professional or disciplinary in nature. There could be course experiences and opportunities for the teacher and/or coach who wishes to understand the historical background of his field, the present beliefs and practices of his professional colleagues and associations, and also the comparative and international aspects of physical education and sport. The discipline-oriented student will find innumerable avenues of approach to

scholarly work leading to the M.A., M.S., and/or Ph.D. degrees. Thus, there could be course experiences available for those who wish eventually to add to the body of knowledge in the respective sub-disciplinary areas, as well as for teachers and coaches who wish to follow the M.A.T., M.S.T., and Ed.D. programs in the general area of professional education with specialization in the field of physical education and sport. Obviously, there will be some common core of course experiences in which students pursuing either of these approaches can study together profitably. Also, a number of these course experiences could be offered to students from other academic units or schools who would use the center as a "service unit" within the elective phase of their own academic programs.

The following series of course offerings gives an indication of the type of education experiences that can be made available:

Undergraduate

1. Introduction to (and History of) Physical Education and Sport (freshman or sophomore year)

   Note: Some historical material could also be included in a first course in physical education that attempts to introduce the student to the discipline of physical education as well.

2. Physical Education and Sport Philosophy (sophomore or junior year)

3. Comparative and International Physical Education & Sport (junior or senior year)

4. Special Problems in Physical Education and Sport (junior or senior year)

5. Honors Seminar (junior or senior year for honors students)

Graduate

1. Physical Education and Sport History. An analysis of the research literature related to the historical foundations of physical education and sport; discussion of selected persistent problems as the influence of economics, politics, nationalism, and religion; also, the influence of other problems such as type of curriculum; methods of instruction; the role of administration; the concept of the healthy body; the use of leisure; the role of dance and music; amateur and professional sport; aims and values; the concept of change, etc. Research papers and a comprehensive review of the literature are required. The undergraduate course in this sub-disciplinary area is a prerequisite. Prior courses in history and history of education are desirable.

2. Physical Education and Sport Philosophy. An analysis of the literature related to the philosophical foundations of physical education and sport. Discussion of normative and analytical approaches to scholarly endeavor in philosophy and educational philosophy as this discipline and sub-discipline might apply to this area of investigation. Review of the leading philosophical tendencies of the Western world primarily with their possible implications for physical education and sport philosophy. Includes an attempt at delineation of one's own personal philosophical stance. Undergraduate pre-requisites: one course in philosophy, one in philosophy of education, and one in physical education and sport philosophy.

3. International Physical Education & Sport. An analysis of the literature related to the comparative and international aspects of physical education and sport. Historical examination of the five identifiable stages in the development of this subject matter in education and physical education. The application of scientific method to the study of persistent and characteristic problems of various societies on a cross-cultural basis as they are related to physical education and sport. Hypotheses, theory-building, model formulation, and individual investigation. Undergraduate prerequisites: one course in comparative physical education; prior courses in regional geography (or other related discipline) and comparative education are desirable.

4. Seminar. Discussions, critiques of completed research and thesis prospectuses, and basic problem solving relative to scholarly writing and research in the history, philosophy, and international (comparative) aspects of physical education and sport. Presentation and criticism of completed student theses, as well as studies by faculty members and visiting professors. A course in research methods and techniques should be taken prior to the seminar experience. Students are encouraged to enroll in Seminar continuously while in residence.

5. Special Projects. Independent research and analysis under the supervision of a graduate faculty member. May be taken for credit several times, although special approval may be needed.

Note: This course could be offered summers as a special group practicum (each of at least three weeks' duration), or during the regular academic year for course experiences that are in the process of development -- that is, prior to possible permanent adoption after successful evaluation.

6. Methods and Techniques of Research in the History, Philosophy, and International (Comparative) Aspects of Physical Education and Sport. Introduction to, review of, and appraisal of research methods and techniques particularly as these might apply to these areas of interest. Emphasis will be placed on relating students to professors who have high degrees of research competence in these subject-matters. Students will be expected to develop a variety of proposals for research projects, all of which will be subject to constructive criticism by all concerned. Pre-requisite experiences should include courses in the history, philosophy, and comparative aspects of physical education and sport, and an elementary course in statistics.

7. Thesis Research. Planning and preparation of theses and dissertations under the supervision of a graduate professor (and committee).

Note: It is important that the reader understand that a pattern seems to be emerging regarding types of degrees awarded, and program sequences elected, for one year of graduate study culminating in a master's degree. Thus, it is recommended that a two-track approach (at least) be followed, and that the emphasis in one track be toward the preparation of "scholar-teachers" and "scholar-administrators," while the second track should be one in which the emphasis is that of a specialization or research curriculum (quite probably culminating eventually in the Ph.D. degree). There seems to be no reason why the work of the proposed Center or Institute for the History, Philosophy, and International Aspects of Physical Education and Sport can't serve the needs and interests of students in both curriculum tracks. The assumption here is that a common core of knowledge and experience is needed by both groups of students.

Appendix #2

Oral History Research in Physical Education and Sport

The idea of oral history research in physical education and sport is a relatively new one, although it was as far back as 1948 when the late Allan Nevins of Columbia University conducted the first interview for the embryonic Oral History Collection of that institution. The first such research office in physical education was started in 1965 when Professor Marianna Trekell was asked to assume the post of Oral History Research Office Director by Professor Earle F. Zeigler, then Executive Office of the Graduate Department of Physical Education at the University of Illinois, Champaign-Urbana. (Professor Zeigler had conceived this plan while at Michigan, but had not been able to implement it there.)

Oral history has been defined as "a spoken reminiscence which has been recorded with the aid of a trained interviewer-historian in accordance with recognized ethical and procedural standards and typewritten under his supervision" (V. D. Bernet, "Oral History Can Be Worthwhile," American Archivist, XVIII, 1955, p. 241). Basically, the idea of oral history research is to obtain facts, half-facts, and opinions from the people who were a part of significant events that happened in a particular field of endeavor. These statements should be gathered while the interviewee is still able to recollect accurately that which transpired -- history while it is "warm," so to speak. Much historical data of this type has been lost in the past Now it will be possible increasingly to make this information available for future investigators as part of the library collection of the particular university concerned.*

* Some of this has been adapted from the work of Professor [illegible] with the assistance or advice of Professor Zeigler.

The purpose of the oral history research program is, therefore, to obtain valuable source material- raw historical data - through tape-recorded interviews with persons who have made, and perhaps are still making, important contributions to the field of physical education and sport. In this instance an effort can be made to relate their thoughts to one or more of some fifteen persistent historical problems that have been identified -- or perhaps some portion thereof about which they may have particularly strong feelings, or with which they may have actually played a part in years past. In addition, an effort should be made to gather significant data from those leaders in physical education and sport relative to their own personal memoirs. It may be possible to obtain data which has not previously been recorded in any form elsewhere.

The persistent historical problems, which have been identified to this point by Zeigler and his associates (Cf. p. 6), are considered primarily as they affect sport, play, exercise, and dance. As it is evolving, the field of physical education and sport -- or however it may be designated -- appears to be concerned with the art and science of human movement, and particularly as this basic aspect of man's life relates to what is deemed to be healthful, physical and recreative activity.

The execution of a project of this type on a continuing basis is not a simple task, but it can presumably be a most satisfying one to those most closely involved. Obviously, the oral historian must develop a fine working unit from the standpoint of personnel, facilities, and equipment. The oral historian, any associates or assistants, and secretarial staff members must be competent and interested in the work. Administrators and others may find it

difficult at first to comprehend fully why such a research office doesn't seem to be producing more results than appear to be evident. The point should be made continually that the results of the work of such an office are part of a developing library of oral history. The data is thereby made available for historians and others concerned to examine and use if needed in projects of their own.

The oral historian can't just say to a visiting dignitary who might have influence the history of the field, "why don't you stop by the Office so that I may tape a conversation with you?" The analogy about the iceberg -- being seven-eighths under the water -- appears correct in this instance. To do the best possible work -- which means to be prepared to ask the right questions -- the oral historian should do a great deal of planned reading in advance. Such reading might include what the man or woman has written, what has been said about the person, and other selected materials describing those events with which he may have been involved. The interview schedules should be developed in keeping with the particular persistent problems being discussed at the time of the interview(s). And this says nothing about what happens after the interview; how the material is transcribed, proofread, and edited by those concerned; and how decisions are made about how and when such material will be made available to historical scholars.

An operating manual containing the policies and procedures that are to be employed by the Oral History Research Office should be developed by the director and his advisory committee (presumably with student representation). Broadly speaking, it might cover

the following aspects of the work:

1. Purpose
2. Organization and Administration of the Program
   a. The Oral History Research Committee
   b. Interviewers
   c. Transcriber
3. Selection of People to Be Interviewed Preliminarily
4. Restriction on Use of Memoirs
5. Action Guidelines
   a. Pre-interview
   b. Interview
   c. Post-interview
6. Use of Memoirs
7. Conditions of Use
8. Equipment
9. Budget
10. Reports and Evaluation

Summary. Although the idea of oral history research in physical education and sport is quite new, there is no doubt but that it can be a valuable and highly useful adjunct to historical investigation. The availability of such a unit would mean that the faculty and students relating to the proposed center would be able to get help in connection with their specific interests and projects. A research office of this type will be an ongoing venture requiring the services of a relatively small number of qualified people. Because people will not typically appreciate the value of the accumulation of this tape-recorded and transcribed historical data about so many persistent historical problems, a public relations effort will be needed to keep people informed about the availability of such information. Annual reports explaining the accretion of historical data concerning the designated persistent problems, the availability of the information, and the conditions under which such material can be used should be developed. A small brochure explaining the Office's basic functions should be made available, and occasional publicity releases featuring a human interest story about the work of the service would

help greatly. A relationship can be established with the university archivist to the mutual benefit of both parties concerned. An operating manual containing policies and procedures can be invaluable in the promotion of the work of the oral historian and his associates.

Appendix #3

Suggestions for the Development of a Sports Museum

The concept of a sports museum is neither unique or new. There have been such developments within professional sport in the United States, and within amateur sport in such countries as Czechoslovakia and Switzerland. What is new in this proposal is the idea of viewing this subject from an international, national, regional, provincial (or state), urban, and institutional standpoint -- and then locating such a museum within the scholarly environment of a university. Here is a plan, therefore, to inaugurate an integrated program of artifact collection, verification, documentation, and display. It is important to initiate programs like this within a number of universities before more of the cultural heritage is irretrievably lost.

Purpose of the Program

The development of a sports museum of the type envisaged would have a twofold purpose, both of which relate well to a university-based center.

1. Such a museum would serve as a repository for objects which should be preserved because of their aesthetic, historic, or scientific importance. Once gathered, the objects could be fully documented -- their history developed in the greatest possible detail -- such that their value for scholars and students would not be lost.

2. A museum of this type would provide data for developing useful educational aids. Film strips, slide sequences,

and sound-on-slide sequences, complete with sources, could be developed for distribution. In addition, many typical, commonplace objects, accurately identified and documented so as to demonstrate physical characteristics, associations, principles, or processes, could be preserved.

Subsidiary Areas for Development

Coupled with a strong national orientation, it would be possible to organize several subdivisions, of an international nature perhaps, within the museum. The following partial list serves only to provide an indication of the many areas which could be developed:

1. Sports and Games in Traditional Cultures. Games and sports are universal and transcend history. A valid and valuable addition to a sports museum would be a collection of artifacts, copies of artifacts, and photographs which reflect the sporting practices of early civilizations. Two civilizations that have had a marked effect upon Western culture -- Greece and Rome -- offer unlimited possibilities. In addition to these, there are also numerous other societies whose game patterns and game equipment have had a significant influence upon North American culture (e.g., rubber was first introduced into Euro-North American culture in the form of a rubber ball which was used by the Mesoamericans in an elaborate ball game).

2. Comparative Aspects of Games and Sports. An increasing amount of research is being carried out on various comparative aspects of sports, but a sports museum would offer a unique opportunity to display pictographically, as well as with concrete examples, the changes in a game due to cultural or technological impact.

3. Regional and University-oriented Aspects of Sport and Games. Wherever the museum is located, a special emphasis should be made to begin sub-divisions relating to sport in the particular urban area and/or region. If the museum is housed at a university, it would obviously be most appropriate to preserve the athletic tradition of men's and women's sports at this institution.

4. Accomplishments of Ethnic Minority Groups in Sport. In Canada the sporting traditions of both Upper Canada and Lower Canada need to be preserved, not to mention the games and sports of the Canadian Eskimos and the Canadian Indians. These latter individuals and groups should be recognized for their contribution as they seek full identity and equality of opportunity in the culture. Such a subdivision of a sports museum could feature exhibits about the athletic achievements of these groups of citizens.

Organization of the Museum

1. Legal Status. Such a museum would have to have legal status so that it could enter into contracts and hold title to its collections, equipment, and real property. In addition, it should be able to collect and disburse funds. Directly or indirectly, a museum must be chartered or incorporated according to the laws of the province/state in which it is situated. As a non-profit, educational organization, a museum fits well within the university structure.

2. Governing Board. The dean or director of the educational unit under which the museum is constituted would be the administrative officer to whom the administrative head of the museum would be responsible. The museum should have an advisory board which would be responsible for the formulation of management policies. These members could be selected both from within the field of physical educa- and sport and without.

3. Director of the Museum. The museum director would be directly responsible to the administrative head of the larger center of which it is a sub-division. The director then administers the policies established by the museum's governing board. Other operating responsibilities would include the following:

   a. Acquisition of artifacts, copies of artifacts, photographs, etc.
   b. Organization of records related to the acquisition of these materials
   c. Submission of an annual budget
   d. Organization and development of educational aids taken from the materials available at the museum
   e. The searching for and completion of accurate documentation for all objects or artifacts available
   f. Supervision of the graduate students and part-time employees involved in research and other duties pertinent to the museum

4. Physical Plant. The museum would be a part of the center for the history, philosophy, and international aspects of sport and physical education, and as such it would share space with the other four units included in the center. The area in which the museum would be housed should be readily accessible to visitors. In designing the structural features of the area, consideration should be given to (a) traffic patterns through the building; (b) fireproofing; (c) display characteristics; (d) storage; and (e) an area for filing collection records.

A good rule of thumb regarding area division is 40:40:20. Forty percent of the floor space would be for exhibits; forty percent for collection storage and filing rooms; and twenty percent for offices and work rooms (C. E. Guthe, "So You Want a Good Museum," in The American Association of Museums, New Series No. 17, 1957, 18.

5. Operating Budget. The budget would typically include both capital and expendable aspects. The capital budget would cover the cost of investment in real property such as (a) permanent collections, (b) furnishings, (c) display cases, (d) tools and instruments, and (e) the total cost of construction and installation of long-term display complexes. The expendable budget would include (a) administrative expenses, (b) equipment maintenance, (c) collection care, (d) exhibits, and (e) miscellaneous.

Summary

The development of a sports museum as an integral part of a center for the history, philosophy, and international aspects of sport and physical education would serve many functions within the host university, the city and region where located, and the nation as a whole. It would help to preserve much of a heritage relating to games and sports that is being lost with each passing year. The need to search out, verify, and document artifacts, while placing them in their contemporary setting, would provide fertile research areas for graduate students in physical education who were interested in pursuing the study of history or undertaking comparative analysis. At the present time such an organization is only a concept. It will require imagination and initiative on the part of many if regional museums are to eventually develop on this continent. The potential gain will assuredly be worth the effort and the financial cost.

Appendix #4

Review of Physical Education & Sport

Another important aspect of the work of the recommended center for the history, philosophy, and international aspects of sport and physical education is the idea of a review or periodical that would be devoted exclusively to the publication of scholarly papers in these areas of interest. This should probably be a semi-annual

publication -- a journal, which in addition to the inclusion of the articles themselves in full (whether in English or French), would also contain 200-word abstracts of each article in the other language.

Such a journal could have different aspects to it. For example, the articles might typically revolve around the sporting tradition of the university, city, and region of the province or state in which it is located. Nevertheless, in each issue there could be one article of a larger regional or national character -- and also one with an international flavor. Through such a medium, therefore, the editors would be attempting to bridge regularly communications chasm that exists among these various levels in our modern world, and particularly as this gap may exist in the field of physical education and sport. In Canada such a journal could work toward the improvement of the understanding of those living in regions of Canada where different languages are spoken.

In the journal or review the plan would, therefore, offer a two-way channel of communication through the articles describing those aspects of sport and physical education extant in the geographical region from which the journal emanates, but there would also be selected articles of a national or international character, not to mention the bi-lingual aspect and the article from another region of the country (i.e., the "abstract feature" in the other tongue and the occasional article that is basically in the other language).

Each edition of the publication would contain a brief editorial and from eight to ten articles. Book reviews and other commentaries would be invited as well. With this type of approach, it is

hoped that the journal would be welcomed by a clientele both within the field of physical education and sport and by that much larger group of people who share a common bond with the field through the medium of sports and games.

The planning for such a venture should take place over a two- or three-year period. It will take a certain amount of correspondence and discussion to obtain the volunteer services of a board of associate editors. The selection of a competent editor and a capable publisher or printing company is vitally important to the success of the venture. A large mailing project will be needed to potential subscribers locally, provincially, nationally, and internationally, not to mention the libraries of colleges and universities on this continent and elsewhere. These individuals and organizations should receive a letter from the designated chairman of the editorial board and/or the director of the center; a flyer that may be posted on a bulletin board, and an individual subscription form.

The goal of a publication such as this would be that it fairly soon should become completely self-sustaining, but a seed grant should be sought for the first two or three years to guarantee a good start for the effort. For this reason it would seem wise to expect the chairman of the editorial board, the business manager, and the various associate editors to serve on a voluntary basis. It would be helpful if the Editor could receive a certain amount of released time from his workload as a faculty member, but this might not be possible other than to a slight degree (ten or fifteen percent). Still further, the editor will need some competent secretarial assistance. It would appear reasonable to allot approxi-

mately one-quarter time (10 clock hours a week) for the secretarial assignment in relation to a full workload (40 clock hours). The proposed figure for the annual subscription rate (two issues) is $5.00 (Canadian or U.S.), which is about what the market will bear at home and to a lesser extent abroad. This would seem to be a reasonable figure at this time (1974) in the light of current publication costs for a journal of this type and considering the estimated quantity of production. This would be a non-profit venture and hopefully a professional undertaking of steadily improving calibre.

In summary, therefore, a journal, perhaps to be called the Review of Physical Education and Sport (a journal devoted to the history, philosophy, and comparative aspects of physical education and sport), is being proposed as an integral phase of the total concept of a center for the history, philosophy, and international aspects of physical education and sport. A major goal would be the establishment of a two-way channel of communication between a particular university and the locale or region in which it is located, with a secondary goal of broadening the horizons of the clientele in regard to these aspects of the field at the national and international levels. Additionally, the need to promote a reasonable amount of bilingualism and better understanding is recognized. Planning for this venture should be carried out over a period of several years, and yet there is an urgent need for improved communication which indicates that the time is ripe for such a development.

Appendix #5

The Documentation Center

The world today is undergoing a technological explosion unparalleled in history. The upshot of this revolution on this continent is that almost ninety-five percent of the working population has been freed from agricultural or subsistence pursuits. With so many people being made available to carry out the vast number of differentiated activities, it is not illogical or inconsistent that the results of the efforts of a segment of this group, the scholars and scientists, have been the generation of massive amounts of information. However, at the present time the only practical means of transmitting this information is via so-called static methods in the form of written materials and records. The problem facing researchers in all fields is the need to develop scientific short cuts which will permit them to rapidly and accurately discover, delineate, and organize this information into meaningful relationships such that the end result will be knowledge that can be put to work in order to help men solve their pressing problems.

Toward this end, a number of methods of information storage and retrieval have been devised so that individuals interested in obtaining access to specific bits of information will be able to produce it with a minimum of unintentionally duplicated work. Such a system has been defined as:

> " . . . the handling and processing necessary to complete the transmission (of information) from recorder to receiver, . . . the systematic methods and procedures whereby the information contained in documents, as they become part of an organization's collection, is tagged, identified, or characterized so that it may be located efficiently, rapidly, and inexpensively when it is needed." (J. C. Costello, Training Manual and Workbook for Use in Abstracting and Coordinate Indexing. Washington: Battelle Memorial Institute, 1964, p. 3.

Information storage and retrieval techniques, which are the heart of a documentation center, can be justified economically in any discipline that has its own body of reusable information.

Purpose of the Documentation Center

Within the total structure of a center for the history, philosophy, and international aspects of sport and physical education, a documentation center would form a vital part. It could have a threefold function: (1) a library, (2) an archive, and (3) an information center. Within the framework of these three overriding functions, a documentation center could serve the following subfunctions:

1. A dissemination service for the users in the field ("users" is here taken to mean the professionals, scholars, journalists, sports writers and critics, etc.)
2. Periodically publish (in the journal or review of the center) special listings of data on hand and topical bibliographies
3. Supply answers to all requests for information, so long as the request is pertinent to the subjects covered by the terms of reference of the center
4. Acquire periodicals, abstracts, papers, reports pertinent to history, philosophy, and international aspects of sport and physical education
5. Be a permanent repository of such documents
6. Abstract and index all such documents in such a way that retrieval of selected items of information can be promptly carried out

Scope of the Center

The documentation center would be designed to provide service for individuals in all parts of the world. Data should, however, be only sent out in English. (Of course, there would be individual variations here as, for instance, in French-speaking Canada.) The primary obligation in this regard should probably be to the schools at all levels and other agencies within the particular geographical region being served by the entire center. Because consultation

requests would probably be so varied, careful attention would have to be given to the development of a user's thesaurus and "search request" form. The use of electronic research and retrieval equipment would be a necessity and, therefore, the indexing system chosen would have to be compatible to the introduction of such mechanization without upsetting normal operations and/or requiring expensive reorganization. Bibliographies, or photocopied abstracts of pertinent articles, papers, etc., would be prepared and mailed to the user. No attempt would be made to interpret the results of the search.

Kinds of Questions Likely to Be Asked of the Center

Since no center of this type exists currently, there can only be speculation as to the kinds of requests that would be made by the users. Based upon the authors' personal experience, it is reasonable to assume that the following data would be demanded of the center:

1. Comprehensive searches for information relative to specific topics or problems
2. Biographical data on important individuals
3. Reproduction of abstracts of articles, papers, addresses pertinent to a specific area of interest
4. Specific facts or verification of facts

No doubt other types of requests will be made, but unexpected search patterns should be relatively simple to initiate if the retrieval system is structured in accordance with already proven principles.

Parameters of an Ideal System for the Center

The following six factors should be given considerable thought before a final decision as to the most suitable storage and retrieval system is made:

1. Low cost. The total cost of the system must be considered --

costs of input, storage, and retrieval. Thought should be given as to the possibility of linking the center's system into the electronic computers already operative on campus and nearby.

2. Open-endedness (expandability). The system must be capable of absorbing normal expansion of data without undue stress which might affect its operation.
3. Simplicity of operation. Most functions should be simple enough to comprehend such that clinical personnel can perform them adequately with a minimum of instruction.
4. Compatibility. The indexing system must be designed so that mechanization of storage and retrieval functions can be introduced without requiring major changes.
5. Speed in retrieval. A normal request which involves only material contained in the center's system should be answerable in a few minutes.
6. High retrieval efficiency. The system should be designed to yield a high ratio of relevant data to extraneous data.

Selection of Storage and Retrieval System

All systems can be made to yield any given item of information ultimately. The determining factor in the selection of a system should be economic efficiency which is usually expressed in terms of total input, storage, and retrieval costs. At the present time, the Uniterm Coordinate Indexing system has received initial experimentation. It provides low input, storage, and retrieval costs, simple operation, unlimited expandability, high retrieval efficiency, fair retrieval speed, and high machine compatibility. An ideal link-up would be to install a terminal which is connected directly to the electronic hardware of the university's computer center where all accession numbers and digitally-coded uniterms would be stored. If such terminals were not available in a university at a reasonable cost (for rental or purchase), batch processing of requests could be made. This would necessitate the installation of a card-punch machine in the documentation office of the center.

The Termatrex System offers an alternative approach -- or at least an "in between stage" -- to the use of computer center storage and retrieval. Like the Uniterm System, the Termatrex System employs a term-entry technique, but these terms -- rather than being stored on magnetic tapes in a computer -- are entered into specified locations plastic term or feature cards. An automatic scanner can handle up to 100,000 items per second. The advantage of this system is that it is self-contained, and does not need to rely upon electronic hardware external to the documentation office of the center or institute.

Summary

It is impossible today for scholars, scientists, or researchers of any type to stay abreast of current writings and data in his or her chosen field without adopting some scientific short-cuts in information storage and retrieval. The traditional card catalogue, while adequate to the task in many respects, has an intolerably slow retrieval rate and a low retrieval efficiency. It is inconceivable that each researcher can or will establish his own more efficient system since such a tactic would involve immense duplication of effort. What is required, therefore, is a documentation center capable of handling search requests for large numbers of individuals accurately, efficiently, and simply. Techniques required to initiate such a documentation office exist currently. The development of such a research office of this type would be a great step forward in enabling scholars and research in our field to work effectively and efficiently in the disciplinary sub-areas of history, philosophy, and international aspects of sport and physical education.